

Transition from Circuit-Switched Network to All-IP Network

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GN Docket Nos. 09-47, 09-51, 09-137

**COMMENTS OF THE NEW JERSEY DIVISION OF RATE COUNSEL
ON NBP NOTICE # 25**

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On the Comments:

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Telecommunications Act of 1996.² The New Jersey Legislature has declared that it is the policy of the State to provide diversity in the supply of telecommunications services, and it has found that competition will “promote efficiency, reduce regulatory delay, and foster productivity and innovation” and “produce a wider selection of services at competitive market-based prices.”³ The FCC’s decisions regarding broadband service and the traditional PSTN will affect New Jersey’s economy, welfare, and ability to compete in a global economy. The availability of affordable broadband service at reasonable speeds, affordable voice service, and communications services (whether delivered over the PSTN or over the IP network) at reasonable levels of quality are critically important to New Jersey consumers. New Jersey consumers’ ability to participate fully in today’s information-dependent society, and to obtain voice and broadband services at reasonable rates and service quality is of paramount interest to Rate Counsel.

II. BACKGROUND

As the FCC recognizes, broadband “is a growing platform over which the consumer accesses a multitude of services, including voice, data, and video in an integrated way across applications and providers.”⁴ As the Commission states, the “evolution of communications services to broadband has a significant impact on the circuit switched Public Switched Telephone Network (PSTN), a system that has provided, and continues to provide, essential services to the country.”⁵ The Commission

² / Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (“1996 Act”). The 1996 Act amended the Communications Act of 1934. Hereinafter, the Communications Act of 1934, as amended by the 1996 Act, will be referred to as “the 1996 Act,” or “the Act,” and all citations to the 1996 Act will be to the 1996 Act as it is codified in the United States Code.

³ / N.J.S.A. 48:2-21.16(a)(4) and 48:2-21.16(b)(1) and (3).

⁴ / Public Notice.

⁵ / *Id.*

seeks comment on whether it should open an NOI, and about which areas of inquiry such an inquiry would address regarding “which policies and regulatory structures may facilitate, and which may hinder, the efficient migration to an all IP world.”⁶ Rate Counsel fully supports such an inquiry and briefly discusses possible issues for inclusion in the NOI in these comments.

III. COMMENT

Overview of IP-based communication:

VoIP transmits voice communication over a broadband Internet connection using packet switching technology. With packet-switching, communications is based on the transmission of small digital packets. There are generally two types of VoIP services available to consumers: over the top VoIP (which is also referred to as nomadic VoIP) and facilities-based VoIP (which is also referred to as fixed VoIP).

- Nomadic VoIP refers to services provided by companies such as Vonage that require users to provide their own broadband Internet access in order to use the service. With this application, the user’s geographic location is not fixed, but instead, the user can connect a computer to any broadband connection; the only relevant “address” is the Internet Protocol (“IP”) address. The “nomadic” nature of over the top VoIP (which makes it impossible to distinguish between intrastate and interstate traffic) contributed to a court decision upholding the FCC’s pre-emption of state regulation.
- In contrast with nomadic VoIP, fixed VoIP is offered on a location-specific basis, e.g., at the customer’s home. Because fixed VoIP is “hard-wired” to the customer

⁶ / *Id.*

premises, and uses the facilities of the cable or telecommunications provider, one can more easily distinguish intrastate traffic from interstate traffic over fixed VoIP than nomadic VoIP. In fact, distinguishing intrastate traffic from interstate traffic should be no different over fixed VoIP than over conventional circuit-switched telephony. In addition, the consumer is buying the VoIP service and the use of the underlying information “pipes” from the same provider.

The FCC’s definition for VoIP, as set forth in its rules (47 C.F.R. §9.3) is as follows: “An interconnected Voice over Internet protocol (VoIP) service is a service that:

- (1) Enables real-time, two-way voice communications;
 - (2) Requires a broadband connection from the user’s location;
 - (3) Requires Internet protocol-compatible customer premises equipment (CPE);
- and
- (4) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.”

Issues raised by evolving technology and their potential impact on consumers

Technological evolution and progress can bring benefits to consumers through diversity of offerings, the development of new applications, and lower prices. Therefore Rate Counsel welcomes the potential benefits resulting from industry’s transition from the PSTN to an “IP world.” However, as the Commission explores relevant policy matters that this transition raises, it is important to recognize that consumers’ interest in adequate regulatory protection regarding rates and service quality does not depend on the

underlying technological platform. Whether such communication occurs over the traditional PSTN or the IP-based platform, consumers depend on reliable and affordable ways to communicate. Simply because a service may be offered using a new technology does not diminish the importance of such goals.

Where the IP platform in specific geographic markets is being controlled by too few providers to yield effective competition, regulatory oversight is essential. Therefore, Rate Counsel urges the Commission to be wary of carriers' attempts to reduce or eliminate regulatory oversight. Technological innovation does not necessarily correspond with effective competition. By way of analogy, when Verizon (and other carriers) replaced its electromechanical switches with digital switches, this transition yielded new products for consumers (caller identification, touch tone, etc.), which consumers now take for granted. But that transition did not alter Verizon's position as the dominant provider in its geographic markets.

Rate Counsel acknowledges that today's technological changes may be far more sweeping than were past evolutionary phases in the industry, but nonetheless, urges the Commission to distinguish between technological changes and market-disciplining changes. Among the issues that the Commission should include in its NOI are:

- *State regulatory oversight:* Rate Counsel recommends that through the NOI, the FCC clarify that states have a clear role in regulating VoIP, particularly, fixed VoIP. Through Section 706 of the 1996 Act, State Commissions and the Commission have explicit authority to promote advanced services. IP enabled services should remain subject to the requirements of Section 251, 252, and 271 of the Telecommunications Act including the role that state commissions play.

Section 2(b) of the Act preserves state authority over intrastate services and that authority is not affected by whether the technology is circuit switched or IP enabled services.

- *Market Structure Issues:* As Rate Counsel has repeatedly demonstrated in comments filed with the Commission,⁷ and as others have recognized, there is an emerging control of broadband pipes by a duopoly,⁸ which suggests that continuing government oversight and regulation is critical to protect consumers in the IP world. Therefore any NOI should raise questions such as:
 - Who controls the IP-based platform within specific geographic markets?
 - What factors will control whether excessive concentrations of power exist at any particular layer of the network?
 - What is the role of open access to increasing the likelihood of effective competition developing?⁹

⁷ / See e.g., *In the Matter of A National Broadband Plan for Our Future*, GN Docket No. 09-51, Rate Counsel Comments, June 8, 2009, at 39; *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, FCC GN Docket No. 07-45, Rate Counsel Comments, May 16, 2007, at 18-21, citing and attaching Susan M. Baldwin, Sarah M. Bosley and Timothy E. Howington, "The Cable-Telco Duopoly's Deployment of New Jersey's Information Infrastructure: Establishing Accountability," White Paper prepared for the Public Advocate of New Jersey Division of Rate Counsel, January 19, 2007.

⁸ / See, e.g., "The Centripetal Network: How the Internet Holds Itself Together, and the Forces Tearing It Apart," Kevin Werbach, 42 U.C.Davis L. Rev. 343, December 2008. See *id.*, at 10: "If such a scenario came to pass, the Internet backbone could evolve away from the current uneven but relatively stable market structure, in which large backbones have an advantage over smaller players but where universal connectivity is preserved through market forces. The new backbone ecosystem would be dominated by, in all likelihood, two to three independent "archipelagos" involving a combination of backbone, last-mile, and content/information service assets." See also, *id.*, at 11 describing AT&T's and Verizon's "lion's share of the nationwide DSL access market" and the control by a small number of cable operators as their primary competitors.

⁹ / Open access promotes competition. *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, October 2009 (draft), The Berkman Center for Internet and Society. See *id.*, e.g., at 11-12, and Part 4. See p. 75 stating: "Contrary to perceptions in the United State, there is extensive evidence to support the position, adopted almost universally by other

- What do the data that the FCC is collecting through the new, revised Form 477¹⁰ show about VoIP demand, VoIP suppliers, prices, and broadband markets?
- *Pricing Issues*
 - What prices prevail for IP-based services?
- *Service Quality Issues*
 - What recourse, if any, do consumers have if the quality of their IP-based service deteriorates?
 - ARMIS service quality data should be collected and analyzed regardless of the platform.
- *Consumer Education*
 - The NOI could seek information about the existence of and role of consumer education. Information is essential to enable “the efficient migration to an all IP world.”¹¹
- *Protections for people with disabilities, low income and seniors*
 - The Commission, in its Public Notice, specifically identifies as a possible issue for investigation “how to continue ensuring appropriate protection for and assistance to people with disabilities, and low income and seniors

advanced economies, that open access policies, where undertaken with serious regulatory engagement, contributed to broadband penetration, capacity, and affordability in the first generation of broadband.”

¹⁰ / Among other things, the FCC now requires VoIP providers to report subscribership information on their Form 477 reports. In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, WC Docket No. 07-38, Report And Order And Further Notice Of Proposed Rulemaking, released: June 12, 2008 (“Form 477 Order”), at paras. 25-31.

¹¹ / Public Notice.

in the transition to an IP-based communications world.”¹² Rate Counsel supports the inclusion of these issues in any forthcoming NOI.

The evolution of new technologies and applications, and the choices that such advancements offer consumers are of critical importance to New Jersey. Ultimately, competition and innovation yield greater diversity in choice among telecommunications offerings than consumers now have, possibly lower rates, and possibly higher levels of service quality. Indeed, where market forces yield service that is offered at just and reasonable rates and at adequate levels of service quality, regulatory intervention is unnecessary. However, in those evolving markets in which competition is not yet sufficient to protect consumers, appropriate regulatory oversight is essential. Furthermore, the industry’s broadband deployment creates other market imperfections: as Rate Counsel has stated in numerous state and federal regulatory proceedings, regulatory oversight is essential to ensure that: (1) no consumers are left on the “other side” of the digital divide; (2) consumers continue to have the option for affordable basic local telephone service; (3) consumers have access to affordable broadband service; and (4) the level of consumer protection that the state has worked hard to achieve for telecommunications services is not eroded in the face of technological innovation.

IV. CONCLUSION

Rate Counsel urges the Commission to issue a NOI so that the Commission can establish “the appropriate policy framework to facilitate and respond to the market-led transition in technology and services, from the circuit-switched PSTN system to an IP-

¹² / Public Notice.

based communications world.”¹³ Until the market is developed more fully, the Commission should continue to monitor the transition to IP-based services. Furthermore, the Commission should, through its NOI, eliminate any ambiguity about state commissions’ authority to regulate the rates, terms, and conditions of fixed VoIP. Until such time as consumer awareness and understanding of the evolving telecommunications services and new technologies are greater, adequate consumer education is essential. Furthermore, regardless of whether incumbent local exchange carriers have retired copper plant, all consumers should have the option to purchase telephone service at basic POTS rates. Rate Counsel welcomes the opportunity to participate in any future NOI regarding this important topic.

Respectfully submitted,

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